Volume 107, Number 6, November–December 2002
Journal of Research of the National Institute of Standards and Technology

Subject Index to Volume 107

Numbers in parenthesis in italic type after the volume number are the issue numbers

No. 1 January–February
No. 2 March–April
No. 3 May–June
No. 4 July–August
No. 5 September–October
No. 6 November–December

A

abrasive wear....639(6)
absorption coefficients....483(6)
aluminum oxynitride....299(3)
amplifier noise....431(5)
analytical modeling....401(5)
argon....149(2)
atom optics....319(4)
atomic fraction....547(6)
atomic lines....509(6)
atomic number....547(6)
atomic spectra....149(2)
autocorrelation....1(1)

B

bond integrity....445(5)
bound abrasives....639(6)
boundary value theory....355(4)
BRDF....247(3)

C

C-centered cell....373(4)
$C_2H_2^+$....63(1)
$C_2H_4^+$....63(1)
$C_2H_6^+$....63(1)
^{14}C speciation....279(3)
cellular automata....179(2)
cement hydration....137(2)
centered monoclinic cells....373(4)
CH_2^+....63(1)
CH_3^+....63(1)
CH_4^+....63(1)
chemical heterogeneity....713(6)
chemical-mechanical polishing....639(6)
circular apertures....355(4)
collective dynamics....179(2)
colorimetry....363(4)
communication networks....179(2)
computational algorithm....413(5)
computer rendering....247(3)
conductivity....393(5)
congestion control....179(2)
conventional cells....373(4)
copper-gold alloy....663(6)
correlation function....1(1)
cryogen-free cooling....621(6)
cumulative superposition....401(5)
cystallography....425(5)

D

data analysis methods....1(1)
diamond indenter....401(5)
diffraction....355(4)
diffractive optics....319(4)
digital preservation....93(1)
dimensional metrology....193(2)
dismensioning and tolerancing....193(2)
DNA....319(4)
dose rate....171(2)
dynamic elasticity....445(5)

E

EDXS....531(6)
effective intrinsic carrier concentrations....69(1)
elastic scattering....547(6)
electron beam emittance....419(5)
electron beam x-ray microanalysis....487(6)
electron fraction....547(6)
electron ionization cross sections....487(6)
electron microprobe....687(6)
electron microprobe standards....681(6)
electron probe analysis....555(6)
electron probe microanalysis....503(6), 627(6), 663(6), 713(6)

electron probe x-ray microanalyzer ..... 605(6)
electron scattering ..... 547(6)
electron-impact ..... 327(4)
electron-impact ionization ..... 63(1)
elemental carbon ..... 279(3)
elementary symmetric function ..... 413(5)
elliptic integral ..... 413(5)
emission spectrum matching ..... 339(4)
energy dispersive spectrometry ..... 605(6)
energy dispersive x-ray spectrometry ..... 567(6)
energy resolution ..... 621(6)
environmental monitoring ..... 19(1)
environmental scanning electron microscopy .. 567(6)
EPMA ..... 503(6), 693(6), 703(6)
excitation cross section ..... 327(4)
extinction coefficient ..... 339(4)

F

FEA ..... 401(5)
FEFF ..... 223(3)
FeffMPI ..... 223(3)
finite element analysis ..... 401(5)
flow cytometer ..... 83(1)
fluorescein ..... 83(1), 339(4)
fluorescence ..... 83(1)
fossil and biomass carbon ..... 279(3)
Fourier transform spectroscopy ..... 149(2)

G

gallium aluminun arsenide ..... 69(1)
gas flow proportional detector ..... 503(6)
genetic programming ..... 223(3)
GFPC ..... 503(6)
glass ..... 703(6), 713(6)
gloss, reflectance ..... 247(3)
Green's function ..... 445(5)
grinding ..... 627(6)

H

H_3O^+ ..... 63(1)
hardness ..... 299(3)
heat defect ..... 171(2)
helium ..... 327(4)
heterostructures ..... 69(1)
hydrogen ..... 327(4)
Hylleraas-Configuration Interaction ..... 223(3)
hyperelliptic integral ..... 413(5)
hypergeometric R-function ..... 413(5)

I

I-centered cell ..... 373(4)
image analysis ..... 137(2)
immersive environments ..... 223(3)
indentation ..... 401(5)
integrating sphere ..... 363(4)
interface condition ..... 445(5)
international intercomparison ..... 279(3)

K

Kirchhoff ..... 355(4)

L

laser ablation ICP-MS ..... 713(6)
laser cooling ..... 107(1)
lattice matching ..... 425(5)
layered half-space ..... 445(5)
least squares fitting ..... 531(6)
Lennard-Jones ..... 223(3)
light emitting diode ..... 363(4)
lithium ..... 327(4)
loading rate ..... 299(3)
long-range dependence ..... 179(2)
loose abrasives ..... 639(6)
low voltage analysis ..... 555(6)
low voltage microanalysis ..... 605(6)
lymphocyte ..... 339(4)

M

mass averaging ..... 547(6)
mass effect ..... 547(6)
mass fraction ..... 547(6)
mass spectrometry ..... 1(1)
mathematical lattices ..... 373(4), 425(5)
measurement errors ..... 431(5)
MESF ..... 83(1)
MESF value ..... 339(4)
metallography ..... 663(6)
metrology ..... 261(3)
microanalysis .. 483(6), 693(6), 487(6), 531(6), 547(6)
microanalysis standards ..... 687(6)
microbeads ..... 83(1), 339(4)
microbeam ..... 713(6)
microbeam standards ..... 681(6)
microheterogeneity ..... 687(6)

microhomogeneity ..... 687(6)
microprobe ..... 703(6)
microscale characterization ..... 713(6)
microstructure ..... 137(2)
mineral standards ..... 681(6)
modeling and simulation ..... 179(2)
molecular ions ..... 63(1)
multi-element compounds ..... 547(6)

N

nanostructures screen saver science ..... 223(3)
NDE theoretical mechanics ..... 445(5)
near zone ..... 355(4)
network traffic ..... 179(2)
noise measurement ..... 431(5)

O

optics ..... 355(4)
orthophosphates ..... 693(6)
oxide inclusions ..... 663(6)

P

parallel computing ..... 223(3)
particle analysis ..... 555(6)
pH ..... 339(4)
photoassociation spectroscopy ..... 107(1)
photometry ..... 363(4)
Plaster of Paris ..... 137(2)
polarization ..... 355(4)
polishing ..... 627(6), 639(6)
polymer ..... 1(1)
potassium chloride ..... 393(5)
pressure shifts ..... 149(2)
pseudo-Voigt profiles ..... 509(6)
pulse pile-up rejection ..... 503(6)

Q

QDPD ..... 223(3)
quantitation ..... 83(1)
quantitative analysis ..... 693(6), 627(6)
quantitative flow cytometry ..... 339(4)
quantitative microanalysis ..... 547(6)

R

radiation chemistry ..... 171(2)
radiometry ..... 363(4)
rare earth elements ..... 693(6)
rare earth phosphates ..... 693(6)
Rayleigh-Sommerfeld ..... 355(4)
recurrence relations ..... 413(5)
REE ..... 693(6)
reference materials ..... 681(6)
Rockwell hardness ..... 401(5)

S

sample preparation ..... 627(6), 663(6)
scalar wavefunctions ..... 355(4)
scanning electron microscope ..... 555(6), 605(6)
scanning electron microscopy ..... 567(6)
scattering length ..... 107(1)
scientific visualization ..... 223(3)
sealed proportional counter, XePC ..... 503(6)
secondary ion mass spectrometry ..... 663(6), 713(6)
series expansion ..... 413(5)
silicon carbide ..... 299(3)
simulation ..... 261(3), 431(5)
soft x-ray bands ..... 509(6)
solar ultraviolet ..... 19(1)
spectral line shapes ..... 107(1)
spectroradiometers ..... 19(1)
spectrum processing ..... 531(6)
SRM 1649a ..... 279(3)
SRM 1932 ..... 83(1)
SRMs for microanalysis ..... 687(6)
standard materials for microanalysis ..... 687(6)
Standard Reference Material 482 ..... 663(6)
standards ..... 261(3), 393(5), 693(6), 703(6)
storage ring ..... 419(5)
surface and subsurface damage ..... 639(6)
synchrotron radiation ..... 419(5)

T

thermophysical properties ..... 261(3)
tiling ..... 319(4)
time series ..... 1(1)
total carbon certified value ..... 279(3)
trace element ..... 703(6)
transition-edge sensor ..... 621(6)

U

ultracold sodium atom collisions ..... 107(*1*)
uncertainty ..... 431(*5*)

V

variable pressure scanning electron
microscopy (VP-SEM) ..... 567(*6*)
virtual WDS ..... 497(*6*)
visualization ..... 137(*2*)
VRML ..... 193(*2*)

W

water calorimetry ..... 171(*2*)
wave mechanics ..... 445(*5*)
wavelength dispersive spectrometry ..... 605(*6*)
wavelength dispersive x-ray analysis ..... 497(*6*)
wavelength dispersive x-ray spectrometers ..... 497(*6*)
WDS instrumental disortions ..... 509(*6*)
weak focusing ..... 419(*5*)

X

x rays ..... 503(*6*), 531(*6*)
x-ray absorption ..... 483(*6*)
x-ray detectors ..... 503(*6*)
x-ray mapping ..... 567(*6*)
x-ray microanalysis .. 487(*6*), 555(*6*), 567(*6*), 621(*6*), 639(*6*)
x-ray microtomography ..... 137(*2*)
x-ray optics ..... 319(*4*)
x-ray spectrometer ..... 621(*6*)
x-ray spectrometry ..... 483(*6*), 567(*6*), 605(*6*)
XML ..... 93(*1*)

Volume 107, Number 6, November–December 2002
Journal of Research of the National Institute of Standards and Technology

Author Index to Volume 107

Numbers in parenthesis in italic type after the volume number are the issue numbers

No. 1 January–February
No. 2 March–April
No. 3 May–June
No. 4 July–August
No. 5 September–October
No. 6 November–December

A

Abassi, F.

Quantitating Fluorescence Intensity From Fluorophores: Practical Use of MESF Values. Wang, L., Gaigalas, A. K., Abassi, F., Marti, G. E., Vogt, R. F., Schwarz, A., **107**(*4*), 339 (2002).

Ali, M. A.

Electron-Impact Total Ionization Cross Sections of Hydrocarbon Ions. Irikura, K. K., Kim, Y.-K., Ali, M. A., **107**(*1*), 63 (2002).

am Ende, B. A.

Accelerating Scientific Discovery Through Computation and Visualization II. Sims, J. S., George, W. L., Satterfield, S. G., Hung, H. K., Hagedorn, J. G., Ketcham, P. M., Griffin, T. J., Hagstrom, S. A., Franiatte, J. C., Bryant, G. W., Jaskólski, W., Martys, N. S., Bouldin, C. E., Simmons, V., Nicolas, O. P., Warren, J. A., am Ende, B. A., Koontz, J. E., Filla, B. J., Pourprix, V. G., Copley, S. R., Bohn, R. B., Peskin, A. P., Parker, Y. M., Devaney, J. E., **107**(*3*), 223 (2002).

Anderson, W. H. C.

Argon I Lines Produced in a Hollow Cathode Source, 332 nm to 5865 nm. Whaling, W., Anderson, W. H. C., Carle, M. T., Brault, J. W., Zarem, H. A., **107**(*2*), 149 (2002).

Arp, U.

Influence of the Vertical Emittance on the Calculability of the Synchrotron Ultraviolet Radiation Facility. Arp, U., **107**(5), 419 (2002).

B

Baruchel, J.

The Visible Cement Data Set. Bentz, D. P., Mizell, S., Satterfield, S., Devaney, J., George, W., Ketcham, P., Graham, J., Porterfield, J., Quenard, D., Vallee, F., Sallee, H., Boller, E., Baruchel, J., **107**(*2*), 137 (2002).

Beaubien, A.

The 1997 North American Interagency Intercomparison of Ultraviolet Spectroradiometers Including Narrowband Filter Radiometers. Lantz, K., Disterhoft, P., Early, E., Thompson, A., DeLuisi, J., Berndt, J., Harrison, L., Kiedron, P., Ehramjian, J., Bernhard, G., Cabasug, L., Robertson, J., Mou, W., Taylor, T., Slusser, J., Bigelow, D., Durham, B., Janson, G., Hayes, D., Beaubien, M., Beaubien, A., **107**(*1*), 19 (2002).

Beaubien, M.

The 1997 North American Interagency Intercomparison of Ultraviolet Spectroradiometers Including Narrowband Filter Radiometers. Lantz, K., Disterhoft, P., Early, E., Thompson, A., DeLuisi, J., Berndt, J., Harrison, L., Kiedron, P., Ehramjian, J., Bernhard, G., Cabasug, L., Robertson, J., Mou, W., Taylor, T., Slusser, J., Bigelow, D., Durham, B., Janson, G., Hayes, D., Beaubien, M., Beaubien, A., **107**(*1*), 19 (2002).

Benner, B. A., Jr.

A Critical Evaluation of Interlaboratory Data on Total, Elemental, and Isotopic Carbon in the Carbonaceous Particle Reference Material, NIST SRM 1649a. Currie, L. A., Benner, B. A., Jr., Kessler, J. D., Klinedinst, D. B., Klouda, G. A., Marolf, J. V., Slater, J. F., Wise, S. A., Cachier, H., Cary, R., Chow, J. C., Watson, J., Druffel, E. R. M.,

Masiello, C. A., Eglinton, T. I., Pearson, A., Reddy, C. M., Gustafsson, Ö., Quinn, J. G., Hartmann, P. C., Hedges, J. I., Prentice, K. M., Kirchstetter, T. W., Novakov, T., Puxbaum, H., Schmid, H., **107**(*3*), 279 (2002).

Bennett, H. S.

A Systematic Approach for Multidimensional, Closed-Form Analytic Modeling: Effective Intrinsic Carrier Concentrations in $Ga_{1-x}Al_xAs$ Heterostructures. Bennett, H. S., Filliben, J. J., **107**(*1*), 69 (2002).

Bentz, D. P.

The Visible Cement Data Set. Bentz, D. P., Mizell, S., Satterfield, S., Devaney, J., George, W., Ketcham, P., Graham, J., Porterfield, J., Quenard, D., Vallee, F., Sallee, H., Boller, E., Baruchel, J., **107**(*2*), 137 (2002).

Berndt, J.

The 1997 North American Interagency Intercomparison of Ultraviolet Spectroradiometers Including Narrowband Filter Radiometers. Lantz, K., Disterhoft, P., Early, E., Thompson, A., DeLuisi, J., Berndt, J., Harrison, L., Kiedron, P., Ehramjian, J., Bernhard, G., Cabasug, L., Robertson, J., Mou, W., Taylor, T., Slusser, J., Bigelow, D., Durham, B., Janson, G., Hayes, D., Beaubien, M., Beaubien, A., **107**(*1*), 19 (2002).

Bernhard, G.

The 1997 North American Interagency Intercomparison of Ultraviolet Spectroradiometers Including Narrowband Filter Radiometers. Lantz, K., Disterhoft, P., Early, E., Thompson, A., DeLuisi, J., Berndt, J., Harrison, L., Kiedron, P., Ehramjian, J., Bernhard, G., Cabasug, L., Robertson, J., Mou, W., Taylor, T., Slusser, J., Bigelow, D., Durham, B., Janson, G., Hayes, D., Beaubien, M., Beaubien, A., **107**(*1*), 19 (2002).

Bigelow, D.

The 1997 North American Interagency Intercomparison of Ultraviolet Spectroradiometers Including Narrowband Filter Radiometers. Lantz, K., Disterhoft, P., Early, E., Thompson, A., DeLuisi, J., Berndt, J., Harrison, L., Kiedron, P., Ehramjian, J., Bernhard, G., Cabasug, L., Robertson, J., Mou, W., Taylor, T., Slusser, J., Bigelow, D., Durham, B., Janson, G., Hayes, D., Beaubien, M., Beaubien, A., **107**(*1*), 19 (2002).

Boatner, L. A.

Contamination in the Rare-Earth Element Orthophosphate Reference Samples. Donovan, J. J., Hanchar, J. M., Picolli, P. M., Schrier, M. D., Boatner, L. A., Jarosewich, E., **107**(*6*), 693 (2002).

Bohn, R. B.

Accelerating Scientific Discovery Through Computation and Visualization II. Sims, J. S., George, W. L., Satterfield, S. G., Hung, H. K., Hagedorn, J. G., Ketcham, P. M., Griffin, T. J., Hagstrom, S. A., Franiatte, J. C., Bryant, G. W., Jaskólski, W., Martys, N. S., Bouldin, C. E., Simmons, V., Nicolas, O. P., Warren, J. A., am Ende, B. A., Koontz, J. E., Filla, B. J., Pourprix, V. G., Copley, S. R., Bohn, R. B., Peskin, A. P., Parker, Y. M., Devaney, J. E., **107**(*3*), 223 (2002).

Boller, E.

The Visible Cement Data Set. Bentz, D. P., Mizell, S., Satterfield, S., Devaney, J., George, W., Ketcham, P., Graham, J., Porterfield, J., Quenard, D., Vallee, F., Sallee, H., Boller, E., Baruchel, J., **107**(*2*), 137 (2002).

Bouldin, C. E.

Accelerating Scientific Discovery Through Computation and Visualization II. Sims, J. S., George, W. L., Satterfield, S. G., Hung, H. K., Hagedorn, J. G., Ketcham, P. M., Griffin, T. J., Hagstrom, S. A., Franiatte, J. C., Bryant, G. W., Jaskólski, W., Martys, N. S., Bouldin, C. E., Simmons, V., Nicolas, O. P., Warren, J. A., am Ende, B. A., Koontz, J. E., Filla, B. J., Pourprix, V. G., Copley, S. R., Bohn, R. B., Peskin, A. P., Parker, Y. M., Devaney, J. E., **107**(*3*), 223 (2002).

Brault, J. W.

Argon I Lines Produced in a Hollow Cathode Source, 332 nm to 5865 nm. Whaling, W., Anderson, W. H. C., Carle, M. T., Brault, J. W., Zarem, H. A., **107**(*2*), 149 (2002).

Bright, D. S.

Copper Oxide Precipitates in NBS Standard Reference Material 482. Windsor, E. S., Carlton, R. A., Gillen, G., Wight, S. A., Bright, D. S., **107**(*6*), 663 (2002).

Brown, S. W.

Development of a Tunable LED-Based Colorimetric Source. Brown, S. W., Santana, C., Eppeldauer, G. P., **107**(*4*), 363 (2002).

Bryant, G. W.

Accelerating Scientific Discovery Through Computation and Visualization II. Sims, J. S., George, W. L., Satterfield, S. G., Hung, H. K., Hagedorn, J. G., Ketcham, P. M., Griffin, T. J., Hagstrom, S. A., Franiatte, J. C., Bryant, G. W., Jaskólski, W., Martys, N. S., Bouldin, C. E., Simmons, V., Nicolas, O. P., Warren, J. A., am Ende, B. A., Koontz, J. E., Filla, B. J., Pourprix, V. G., Copley, S. R., Bohn, R. B., Peskin, A. P., Parker, Y. M., Devaney, J. E., **107**(*3*), 223 (2002).

C

Cabasug, L.

The 1997 North American Interagency Intercomparison of Ultraviolet Spectroradiometers Including Narrowband Filter Radiometers. Lantz, K., Disterhoft, P., Early, E., Thompson, A., DeLuisi, J., Berndt, J., Harrison, L., Kiedron, P., Ehramjian, J., Bernhard, G., Cabasug, L., Robertson, J., Mou, W., Taylor, T., Slusser, J., Bigelow, D., Durham, B., Janson, G., Hayes, D., Beaubien, M., Beaubien, A., **107**(*1*), 19 (2002).

Cachier, H.

A Critical Evaluation of Interlaboratory Data on Total, Elemental, and Isotopic Carbon in the Carbonaceous Particle Reference Material, NIST SRM 1649a. Currie, L. A., Benner, B. A., Jr., Kessler, J. D., Klinedinst, D. B., Klouda, G. A., Marolf, J. V., Slater, J. F., Wise, S. A., Cachier, H., Cary, R., Chow, J. C., Watson, J., Druffel, E. R. M., Masiello, C. A., Eglinton, T. I., Pearson, A., Reddy, C. M., Gustafsson, Ö., Quinn, J. G., Hartmann, P. C., Hedges, J. I., Prentice, K. M., Kirchstetter, T. W., Novakov, T., Puxbaum, H., Schmid, H., **107**(*3*), 279 (2002).

Carle, M. T.

Argon I Lines Produced in a Hollow Cathode Source, 332 nm to 5865 nm. Whaling, W., Anderson, W. H. C., Carle, M. T., Brault, J. W., Zarem, H. A., **107**(*2*), 149 (2002).

Carlson, B. C.

Three Improvements in Reduction and Computation of Elliptic Integrals. Carlson, B. C., **107**(*5*), 413 (2002).

Carlton, R. A.

Copper Oxide Precipitates in NBS Standard Reference Material 482. Windsor, E. S., Carlton, R. A., Gillen, G., Wight, S. A., Bright, D. S., **107**(*6*), 663 (2002).

Carpenter, P.

Characterization of Corning EPMA Standard Glasses 95IRV, 95IRW, and 95IRX. Carpenter, P., Counce, D., Kluk, E., Nabelek, C., **107**(*6*), 703 (2002).

Cary, R.

A Critical Evaluation of Interlaboratory Data on Total, Elemental, and Isotopic Carbon in the Carbonaceous Particle Reference Material, NIST SRM 1649a. Currie, L. A., Benner, B. A., Jr., Kessler, J. D., Klinedinst, D. B., Klouda, G. A., Marolf, J. V., Slater, J. F., Wise, S. A., Cachier, H., Cary, R., Chow, J. C., Watson, J., Druffel, E. R. M., Masiello, C. A., Eglinton, T. I., Pearson, A., Reddy, C. M., Gustafsson, Ö., Quinn, J. G., Hartmann, P. C., Hedges, J. I., Prentice, K. M., Kirchstetter, T. W., Novakov, T., Puxbaum, H., Schmid, H., **107**(*3*), 279 (2002).

Chow, J. C.

A Critical Evaluation of Interlaboratory Data on Total, Elemental, and Isotopic Carbon in the Carbonaceous Particle Reference Material, NIST SRM 1649a. Currie, L. A., Benner, B. A., Jr., Kessler, J. D., Klinedinst, D. B., Klouda, G. A., Marolf, J. V., Slater, J. F., Wise, S. A., Cachier, H., Cary, R., Chow, J. C., Watson, J., Druffel, E. R. M., Masiello, C. A., Eglinton, T. I., Pearson, A., Reddy, C. M., Gustafsson, Ö., Quinn, J. G., Hartmann, P. C., Hedges, J. I., Prentice, K. M., Kirchstetter, T. W., Novakov, T., Puxbaum, H., Schmid, H., **107**(*3*), 279 (2002).

Copley, S. R.

Accelerating Scientific Discovery Through Computation and Visualization II. Sims, J. S., George, W. L., Satterfield, S. G., Hung, H. K., Hagedorn, J. G., Ketcham, P. M., Griffin, T. J., Hagstrom, S. A., Franiatte, J. C., Bryant, G. W., Jaskólski, W., Martys, N. S., Bouldin, C. E., Simmons, V., Nicolas, O. P.,

Warren, J. A., am Ende, B. A., Koontz, J. E., Filla, B. J., Pourprix, V. G., Copley, S. R., Bohn, R. B., Peskin, A. P., Parker, Y. M., Devaney, J. E., **107**(*3*), 223 (2002).

Counce, D.

Characterization of Corning EPMA Standard Glasses 95IRV, 95IRW, and 95IRX. Carpenter, P., Counce, D., Kluk, E., Nabelek, C., **107**(*6*), 703 (2002).

Currie, L. A.

A Critical Evaluation of Interlaboratory Data on Total, Elemental, and Isotopic Carbon in the Carbonaceous Particle Reference Material, NIST SRM 1649a. Currie, L. A., Benner, B. A., Jr., Kessler, J. D., Klinedinst, D. B., Klouda, G. A., Marolf, J. V., Slater, J. F., Wise, S. A., Cachier, H., Cary, R., Chow, J. C., Watson, J., Druffel, E. R. M., Masiello, C. A., Eglinton, T. I., Pearson, A., Reddy, C. M., Gustafsson, Ö., Quinn, J. G., Hartmann, P. C., Hedges, J. I., Prentice, K. M., Kirchstetter, T. W., Novakov, T., Puxbaum, H., Schmid, H., **107**(*3*), 279 (2002).

D

DeLuisi, J.

The 1997 North American Interagency Intercomparison of Ultraviolet Spectroradiometers Including Narrowband Filter Radiometers. Lantz, K., Disterhoft, P., Early, E., Thompson, A., DeLuisi, J., Berndt, J., Harrison, L., Kiedron, P., Ehramjian, J., Bernhard, G., Cabasug, L., Robertson, J., Mou, W., Taylor, T., Slusser, J., Bigelow, D., Durham, B., Janson, G., Hayes, D., Beaubien, M., Beaubien, A., **107**(*1*), 19 (2002).

Desclaux, J. P.

Electron-Impact Cross Sections for Dipole- and Spin-Allowed Excitations of Hydrogen, Helium, and Lithium. Stone, P. M., Kim, Y. K., Desclaux, J. P., **107**(*4*), 327 (2002).

Devaney, J. E.

Accelerating Scientific Discovery Through Computation and Visualization II. Sims, J. S., George, W. L., Satterfield, S. G., Hung, H. K., Hagedorn, J. G., Ketcham, P. M., Griffin, T. J., Hagstrom, S. A., Franiatte, J. C., Bryant, G. W., Jaskólski, W., Martys, N. S., Bouldin, C. E., Simmons, V., Nicolas, O. P., Warren, J. A., am Ende, B. A., Koontz, J. E., Filla, B. J., Pourprix, V. G., Copley, S. R., Bohn, R. B., Peskin, A. P., Parker, Y. M., Devaney, J. E., **107**(*3*), 223 (2002).

The Visible Cement Data Set. Bentz, D. P., Mizell, S., Satterfield, S., Devaney, J., George, W., Ketcham, P., Graham, J., Porterfield, J., Quenard, D., Vallee, F., Sallee, H., Boller, E., Baruchel, J., **107**(*2*), 137 (2002).

deWit, R.

Self-Similarity Simplification Approaches for the Modeling and Analysis of Rockwell Hardness Indention. Ma, L., Zhou, J., Lau, A., Low, S., DeWit, R., **107**(*5*), 401 (2002).

Disterhoft, P.

The 1997 North American Interagency Intercomparison of Ultraviolet Spectroradiometers Including Narrowband Filter Radiometers. Lantz, K., Disterhoft, P., Early, E., Thompson, A., DeLuisi, J., Berndt, J., Harrison, L., Kiedron, P., Ehramjian, J., Bernhard, G., Cabasug, L., Robertson, J., Mou, W., Taylor, T., Slusser, J., Bigelow, D., Durham, B., Janson, G., Hayes, D., Beaubien, M., Beaubien, A., **107**(*1*), 19 (2002).

Donovan, J. J.

Averaging of Backscatter Intensities in Compounds. Donovan, J. J., Pingitore, N. E., Jr., Westphal, A. J., **107**(*6*), 547 (2002).

Contamination in the Rare-Earth Element Orthophosphate Reference Samples. Donovan, J. J., Hanchar, J. M., Picolli, P. M., Schrier, M. D., Boatner, L. A., Jarosewich, E., **107**(*6*), 693 (2002).

Druffel, E. R. M.

A Critical Evaluation of Interlaboratory Data on Total, Elemental, and Isotopic Carbon in the Carbonaceous Particle Reference Material, NIST SRM 1649a. Currie, L. A., Benner, B. A., Jr., Kessler, J. D., Klinedinst, D. B., Klouda, G. A., Marolf, J. V., Slater, J. F., Wise, S. A., Cachier, H., Cary, R., Chow, J. C., Watson, J., Druffel, E. R. M., Masiello, C. A., Eglinton, T. I., Pearson, A., Reddy, C. M., Gustafsson, Ö., Quinn, J. G., Hartmann, P. C., Hedges, J. I., Prentice, K. M., Kirchstetter, T. W., Novakov, T., Puxbaum, H., Schmid, H., **107**(*3*), 279 (2002).

Durham, B.

The 1997 North American Interagency Intercomparison of Ultraviolet Spectroradiometers Including Narrowband Filter Radiometers. Lantz, K., Disterhoft, P., Early, E., Thompson, A., DeLuisi, J., Berndt, J.,

Harrison, L., Kiedron, P., Ehramjian, J., Bernhard, G., Cabasug, L., Robertson, J., Mou, W., Taylor, T., Slusser, J., Bigelow, D., Durham, B., Janson, G., Hayes, D., Beaubien, M., Beaubien, A., **107**(*1*), 19 (2002).

E

Early, E.

Quantitating Fluorescence Intensity From Fluorophore: The Definition of MESF Assignment. Schwartz, A., Wang, L., Early, E., Gaigalas, A., Zhang, Y., Marti, G. E., Vogt, R. F., **107**(*1*), 83 (2002).

The 1997 North American Interagency Intercomparison of Ultraviolet Spectroradiometers Including Narrowband Filter Radiometers. Lantz, K., Disterhoft, P., Early, E., Thompson, A., DeLuisi, J., Berndt, J., Harrison, L., Kiedron, P., Ehramjian, J., Bernhard, G., Cabasug, L., Robertson, J., Mou, W., Taylor, T., Slusser, J., Bigelow, D., Durham, B., Janson, G., Hayes, D., Beaubien, M., Beaubien, A., **107**(*1*), 19 (2002).

Eggins, S.

Microbeam Characterization of Corning Archeological Reference Glasses: New Additions to the Smithsonian Microbeam Standard Collection. Vicenzi, E. P., Eggins, S., Logan, A., Wysoczanski, R., **107**(*6*), 719 (2002).

Eglinton, T. I.

A Critical Evaluation of Interlaboratory Data on Total, Elemental, and Isotopic Carbon in the Carbonaceous Particle Reference Material, NIST SRM 1649a. Currie, L. A., Benner, B. A., Jr., Kessler, J. D., Klinedinst, D. B., Klouda, G. A., Marolf, J. V., Slater, J. F., Wise, S. A., Cachier, H., Cary, R., Chow, J. C., Watson, J., Druffel, E. R. M., Masiello, C. A., Eglinton, T. I., Pearson, A., Reddy, C. M., Gustafsson, Ö., Quinn, J. G., Hartmann, P. C., Hedges, J. I., Prentice, K. M., Kirchstetter, T. W., Novakov, T., Puxbaum, H., Schmid, H., **107**(*3*), 279 (2002).

Ehramjian, J.

The 1997 North American Interagency Intercomparison of Ultraviolet Spectroradiometers Including Narrowband Filter Radiometers. Lantz, K., Disterhoft, P., Early, E., Thompson, A., DeLuisi, J., Berndt, J., Harrison, L., Kiedron, P., Ehramjian, J., Bernhard, G., Cabasug, L., Robertson, J., Mou, W., Taylor, T., Slusser, J., Bigelow, D., Durham, B., Janson, G., Hayes, D., Beaubien, M., Beaubien, A., **107**(*1*), 19 (2002).

Eitzen, D. G.

Transient Green's Tensor for a Layered Solid Half-Space With Different Interface Conditions. Ren, S.-C., Hsu, N. N., Eitzen, D. G., **107**(*5*), 445 (2002).

Engle, P. D.

Sample Preparation for Electron Probe Microanalysis—Pushing the Limits. Geller, J. D., Engle, P. D., **107**(*6*), 627 (2002).

Eppeldauer, G. P.

Development of a Tunable LED-Based Colorimetric Source. Brown, S. W., Santana, C., Eppeldauer, G. P., **107**(*4*), 363 (2002).

F

Fialin, M.

Decomposition of Wavelength Dispersive X-Ray Spectra. Rémond, G., Myklebust, R., Fialin, M., Nockolds, C., Phillips, M., Roques-Carmes, C., **107**(*6*), 509 (2002).

Filla, B. J.

Accelerating Scientific Discovery Through Computation and Visualization II. Sims, J. S., George, W. L., Satterfield, S. G., Hung, H. K., Hagedorn, J. G., Ketcham, P. M., Griffin, T. J., Hagstrom, S. A., Franiatte, J. C., Bryant, G. W., Jaskólski, W., Martys, N. S., Bouldin, C. E., Simmons, V., Nicolas, O. P., Warren, J. A., am Ende, B. A., Koontz, J. E., Filla, B. J., Pourprix, V. G., Copley, S. R., Bohn, R. B., Peskin, A. P., Parker, Y. M., Devaney, J. E., **107**(*3*), 223 (2002).

Filliben, J. J.

A Systematic Approach for Multidimensional, Closed-Form Analytic Modeling: Effective Intrinsic Carrier Concentrations in $Ga_{1-x}Al_xAs$ Heterostructures. Bennett, H. S., Filliben, J. J., **107**(*1*), 69 (2002).

Franiatte, J. C.

Accelerating Scientific Discovery Through Computation and Visualization II. Sims, J. S., George, W. L., Satterfield, S. G., Hung, H. K., Hagedorn, J. G., Ketcham, P. M., Griffin, T. J., Hagstrom, S. A., Franiatte, J. C., Bryant, G. W., Jaskólski, W., Martys, N. S., Bouldin, C. E., Simmons, V., Nicolas, O. P., Warren, J. A., am Ende, B. A., Koontz, J. E., Filla, B. J., Pourprix, V. G., Copley, S. R., Bohn, R. B., Peskin, A. P., Parker, Y. M., Devaney, J. E., **107**(*3*), 223 (2002).

G

Gaigalas, A.

Quantitating Fluorescence Intensity From Fluorophore: The Definition of MESF Assignment. Schwartz, A., Wang, L., Early, E., Gaigalas, A., Zhang, Y., Marti, G. E., Vogt, R. F., **107**(*1*), 83 (2002).

Quantitating Fluorescence Intensity From Fluorophores: Practical Use of MESF Values. Wang, L., Gaigalas, A. K., Abassi, F., Marti, G. E., Vogt, R. F., Schwarz, A., **107**(*4*), 339 (2002).

Geller, J. D.

High Count Rate Electron Probe Microanalysis. Geller, J. D., Herrington, C., **107**(*6*), 503 (2002).

Sample Preparation for Electron Probe Microanalysis—Pushing the Limits. Geller, J. D., Engle, P. D., **107**(*6*), 627 (2002).

George, W. L.

Accelerating Scientific Discovery Through Computation and Visualization II. Sims, J. S., George, W. L., Satterfield, S. G., Hung, H. K., Hagedorn, J. G., Ketcham, P. M., Griffin, T. J., Hagstrom, S. A., Franiatte, J. C., Bryant, G. W., Jaskólski, W., Martys, N. S., Bouldin, C. E., Simmons, V., Nicolas, O. P., Warren, J. A., am Ende, B. A., Koontz, J. E., Filla, B. J., Pourprix, V. G., Copley, S. R., Bohn, R. B., Peskin, A. P., Parker, Y. M., Devaney, J. E., **107**(*3*), 223 (2002).

The Visible Cement Data Set. Bentz, D. P., Mizell, S., Satterfield, S., Devaney, J., George, W., Ketcham, P., Graham, J., Porterfield, J., Quenard, D., Vallee, F., Sallee, H., Boller, E., Baruchel, J., **107**(*2*), 137 (2002).

Gillen, G.

Copper Oxide Precipitates in NBS Standard Reference Material 482. Windsor, E. S., Carlton, R. A., Gillen, G., Wight, S. A., Bright, D. S., **107**(*6*), 663 (2002).

Graham, J.

The Visible Cement Data Set. Bentz, D. P., Mizell, S., Satterfield, S., Devaney, J., George, W., Ketcham, P., Graham, J., Porterfield, J., Quenard, D., Vallee, F., Sallee, H., Boller, E., Baruchel, J., **107**(*2*), 137 (2002).

Griffin, T. J.

Accelerating Scientific Discovery Through Computation and Visualization II. Sims, J. S., George, W. L., Satterfield, S. G., Hung, H. K., Hagedorn, J. G., Ketcham, P. M., Griffin, T. J., Hagstrom, S. A., Franiatte, J. C., Bryant, G. W., Jaskólski, W., Martys, N. S., Bouldin, C. E., Simmons, V., Nicolas, O. P., Warren, J. A., am Ende, B. A., Koontz, J. E., Filla, B. J., Pourprix, V. G., Copley, S. R., Bohn, R. B., Peskin, A. P., Parker, Y. M., Devaney, J. E., **107**(*3*), 223 (2002).

Gustafsson, Ö.

A Critical Evaluation of Interlaboratory Data on Total, Elemental, and Isotopic Carbon in the Carbonaceous Particle Reference Material, NIST SRM 1649a. Currie, L. A., Benner, B. A., Jr., Kessler, J. D., Klinedinst, D. B., Klouda, G. A., Marolf, J. V., Slater, J. F., Wise, S. A., Cachier, H., Cary, R., Chow, J. C., Watson, J., Druffel, E. R. M., Masiello, C. A., Eglinton, T. I., Pearson, A., Reddy, C. M., Gustafsson, Ö., Quinn, J. G., Hartmann, P. C., Hedges, J. I., Prentice, K. M., Kirchstetter, T. W., Novakov, T., Puxbaum, H., Schmid, H., **107**(*3*), 279 (2002).

Guttman, C. M.

Data Analysis Methods for Synthetic Polymer Mass Spectrometry: Autocorrelation. Wallace, W. E., Guttman, C. M., **107**(*1*), 1 (2002).

H

Hagedorn, J. G.

Accelerating Scientific Discovery Through Computation and Visualization II. Sims, J. S., George, W. L., Satterfield, S. G., Hung, H. K., Hagedorn, J. G., Ketcham, P. M., Griffin, T. J., Hagstrom, S. A., Franiatte, J. C., Bryant, G. W., Jaskólski, W., Martys, N. S., Bouldin, C. E., Simmons, V., Nicolas, O. P., Warren, J. A., am Ende, B. A., Koontz, J. E., Filla, B. J., Pourprix, V. G., Copley, S. R., Bohn, R. B., Peskin, A. P., Parker, Y. M., Devaney, J. E., **107**(*3*), 223 (2002).

Hagstrom, S. A.

Accelerating Scientific Discovery Through Computation and Visualization II. Sims, J. S., George, W. L., Satterfield, S. G., Hung, H. K., Hagedorn, J. G.,

Ketcham, P. M., Griffin, T. J., Hagstrom, S. A., Franiatte, J. C., Bryant, G. W., Jaskólski, W., Martys, N. S., Bouldin, C. E., Simmons, V., Nicolas, O. P., Warren, J. A., am Ende, B. A., Koontz, J. E., Filla, B. J., Pourprix, V. G., Copley, S. R., Bohn, R. B., Peskin, A. P., Parker, Y. M., Devaney, J. E., **107**(*3*), 223 (2002).

Hanchar, J. M.

Contamination in the Rare-Earth Element Orthophosphate Reference Samples. Donovan, J. J., Hanchar, J. M., Picolli, P. M., Schrier, M. D., Boatner, L. A., Jarosewich, E., **107**(*6*), 693 (2002).

Harrison, L.

The 1997 North American Interagency Intercomparison of Ultraviolet Spectroradiometers Including Narrowband Filter Radiometers. Lantz, K., Disterhoft, P., Early, E., Thompson, A., DeLuisi, J., Berndt, J., Harrison, L., Kiedron, P., Ehramjian, J., Bernhard, G., Cabasug, L., Robertson, J., Mou, W., Taylor, T., Slusser, J., Bigelow, D., Durham, B., Janson, G., Hayes, D., Beaubien, M., Beaubien, A., **107**(*1*), 19 (2002).

Hartmann, P. C.

A Critical Evaluation of Interlaboratory Data on Total, Elemental, and Isotopic Carbon in the Carbonaceous Particle Reference Material, NIST SRM 1649a. Currie, L. A., Benner, B. A., Jr., Kessler, J. D., Klinedinst, D. B., Klouda, G. A., Marolf, J. V., Slater, J. F., Wise, S. A., Cachier, H., Cary, R., Chow, J. C., Watson, J., Druffel, E. R. M., Masiello, C. A., Eglinton, T. I., Pearson, A., Reddy, C. M., Gustafsson, Ö., Quinn, J. G., Hartmann, P. C., Hedges, J. I., Prentice, K. M., Kirchstetter, T. W., Novakov, T., Puxbaum, H., Schmid, H., **107**(*3*), 279 (2002).

Hayes, D.

The 1997 North American Interagency Intercomparison of Ultraviolet Spectroradiometers Including Narrowband Filter Radiometers. Lantz, K., Disterhoft, P., Early, E., Thompson, A., DeLuisi, J., Berndt, J., Harrison, L., Kiedron, P., Ehramjian, J., Bernhard, G., Cabasug, L., Robertson, J., Mou, W., Taylor, T., Slusser, J., Bigelow, D., Durham, B., Janson, G., Hayes, D., Beaubien, M., Beaubien, A., **107**(*1*), 19 (2002).

Hedges, J. I.

A Critical Evaluation of Interlaboratory Data on Total, Elemental, and Isotopic Carbon in the Carbonaceous Particle Reference Material, NIST SRM 1649a. Currie, L. A., Benner, B. A., Jr., Kessler, J. D., Klinedinst, D. B., Klouda, G. A., Marolf, J. V., Slater, J. F., Wise, S. A., Cachier, H., Cary, R., Chow, J. C., Watson, J., Druffel, E. R. M., Masiello, C. A., Eglinton, T. I., Pearson, A., Reddy, C. M., Gustafsson, Ö., Quinn, J. G., Hartmann, P. C., Hedges, J. I., Prentice, K. M., Kirchstetter, T. W., Novakov, T., Puxbaum, H., Schmid, H., **107**(*3*), 279 (2002).

Heinrich, K. F. J.

Uncertainty in Quantitative Electron Probe Microanalysis. Heinrich, K. F. J., **107**(*6*), 483 (2002).

Herrington, C.

High Count Rate Electron Probe Microanalysis. Geller, J. D., Herrington, C., **107**(*6*), 503 (2002).

Höhne, J.

The Microcalorimeter for Industrial Applications. Redfern, D., Nicolosi, J., Höhne, J., Weiland, R., Simmnacher, B., Hollerich, C., **107**(*6*), 621 (2002).

Hollerich, C.

The Microcalorimeter for Industrial Applications. Redfern, D., Nicolosi, J., Höhne, J., Weiland, R., Simmnacher, B., Hollerich, C., **107**(*6*), 621 (2002).

Hsu, N. N.

Transient Green's Tensor for a Layered Solid Half-Space With Different Interface Conditions. Ren, S.-C., Hsu, N. N., Eitzen, D. G., **107**(*5*), 445 (2002).

Hung, H. K.

Accelerating Scientific Discovery Through Computation and Visualization II. Sims, J. S., George, W. L., Satterfield, S. G., Hung, H. K., Hagedorn, J. G., Ketcham, P. M., Griffin, T. J., Hagstrom, S. A., Franiatte, J. C., Bryant, G. W., Jaskólski, W., Martys, N. S., Bouldin, C. E., Simmons, V., Nicolas, O. P., Warren, J. A., am Ende, B. A., Koontz, J. E., Filla, B. J., Pourprix, V. G., Copley, S. R., Bohn, R. B., Peskin, A. P., Parker, Y. M., Devaney, J. E., **107**(*3*), 223 (2002).

Hunt, F. Y.

The Role of Rendering in the Competence Project in Measurement Science for Optical Reflection and Scattering. Westlund, H. B., Meyer, G. W., Hunt, F. Y., **107**(*3*), 247 (2002).

I

Irikura, K. K.

Electron-Impact Total Ionization Cross Sections of Hydrocarbon Ions. Irikura, K. K., Kim, Y.-K., Ali, M. A., **107**(*1*), 63 (2002).

J

Janson, G.

The 1997 North American Interagency Intercomparison of Ultraviolet Spectroradiometers Including Narrowband Filter Radiometers. Lantz, K., Disterhoft, P., Early, E., Thompson, A., DeLuisi, J., Berndt, J., Harrison, L., Kiedron, P., Ehramjian, J., Bernhard, G., Cabasug, L., Robertson, J., Mou, W., Taylor, T., Slusser, J., Bigelow, D., Durham, B., Janson, G., Hayes, D., Beaubien, M., Beaubien, A., **107**(*1*), 19 (2002).

Jarosewich, E.

Contamination in the Rare-Earth Element Orthophosphate Reference Samples. Donovan, J. J., Hanchar, J. M., Picolli, P. M., Schrier, M. D., Boatner, L. A., Jarosewich, E., **107**(*6*), 693 (2002).

Smithsonian Microbeam Standards. Jarosewich, E., **107**(*6*), 681 (2002).

Jaskólski, W.

Accelerating Scientific Discovery Through Computation and Visualization II. Sims, J. S., George, W. L., Satterfield, S. G., Hung, H. K., Hagedorn, J. G., Ketcham, P. M., Griffin, T. J., Hagstrom, S. A., Franiatte, J. C., Bryant, G. W., Jaskólski, W., Martys, N. S., Bouldin, C. E., Simmons, V., Nicolas, O. P., Warren, J. A., am Ende, B. A., Koontz, J. E., Filla, B. J., Pourprix, V. G., Copley, S. R., Bohn, R. B., Peskin, A. P., Parker, Y. M., Devaney, J. E., **107**(*3*), 223 (2002).

Jones, K. M.

Treasure of the Past X: A Spectroscopic Determination of Scattering Lengths for Sodium Atom Collisions. Tiesinga, E., Williams, C. J., Julienne, P. S., Jones, K. M., Lett, P. D., Phillips, W. D., **107**(*1*), 107 (2002).

Julienne, P. S.

Treasure of the Past X: A Spectroscopic Determination of Scattering Lengths for Sodium Atom Collisions. Tiesinga, E., Williams, C. J., Julienne, P. S., Jones, K. M., Lett, P. D., Phillips, W. D., **107**(*1*), 107 (2002).

K

Kessler, J. D.

A Critical Evaluation of Interlaboratory Data on Total, Elemental, and Isotopic Carbon in the Carbonaceous Particle Reference Material, NIST SRM 1649a. Currie, L. A., Benner, B. A., Jr., Kessler, J. D., Klinedinst, D. B., Klouda, G. A., Marolf, J. V., Slater, J. F., Wise, S. A., Cachier, H., Cary, R., Chow, J. C., Watson, J., Druffel, E. R. M., Masiello, C. A., Eglinton, T. I., Pearson, A., Reddy, C. M., Gustafsson, Ö., Quinn, J. G., Hartmann, P. C., Hedges, J. I., Prentice, K. M., Kirchstetter, T. W., Novakov, T., Puxbaum, H., Schmid, H., **107**(*3*), 279 (2002).

Ketcham, P. M.

Accelerating Scientific Discovery Through Computation and Visualization II. Sims, J. S., George, W. L., Satterfield, S. G., Hung, H. K., Hagedorn, J. G., Ketcham, P. M., Griffin, T. J., Hagstrom, S. A., Franiatte, J. C., Bryant, G. W., Jaskólski, W., Martys, N. S., Bouldin, C. E., Simmons, V., Nicolas, O. P., Warren, J. A., am Ende, B. A., Koontz, J. E., Filla, B. J., Pourprix, V. G., Copley, S. R., Bohn, R. B., Peskin, A. P., Parker, Y. M., Devaney, J. E., **107**(*3*), 223 (2002).

The Visible Cement Data Set. Bentz, D. P., Mizell, S., Satterfield, S., Devaney, J., George, W., Ketcham, P., Graham, J., Porterfield, J., Quenard, D., Vallee, F., Sallee, H., Boller, E., Baruchel, J., **107**(*2*), 137 (2002).

Kiedron, P.

The 1997 North American Interagency Intercomparison of Ultraviolet Spectroradiometers Including Narrowband Filter Radiometers. Lantz, K., Disterhoft, P., Early, E., Thompson, A., DeLuisi, J., Berndt, J., Harrison, L., Kiedron, P., Ehramjian, J., Bernhard, G., Cabasug, L., Robertson, J., Mou, W., Taylor, T., Slusser, J., Bigelow, D., Durham, B., Janson, G., Hayes, D., Beaubien, M., Beaubien, A., **107**(*1*), 19 (2002).

Kim, Y.-K.

Electron-Impact Total Ionization Cross Sections of Hydrocarbon Ions. Irikura, K. K., Kim, Y.-K., Ali, M. A., **107**(*1*), 63 (2002).

Electron-Impact Cross Sections for Dipole- and Spin-Allowed Excitations of Hydrogen, Helium, and Lithium. Stone, P. M., Kim, Y.-K., Desclaux, J. P., **107**(*4*), 327 (2002).

Kirchstetter, T. W.

A Critical Evaluation of Interlaboratory Data on Total, Elemental, and Isotopic Carbon in the Carbonaceous Particle Reference Material, NIST SRM 1649a. Currie, L. A., Benner, B. A., Jr., Kessler, J. D., Klinedinst, D. B., Klouda, G. A., Marolf, J. V., Slater, J. F., Wise, S. A., Cachier, H., Cary, R., Chow, J. C., Watson, J., Druffel, E. R. M., Masiello, C. A., Eglinton, T. I., Pearson, A., Reddy, C. M., Gustafsson, Ö., Quinn, J. G., Hartmann, P. C., Hedges, J. I., Prentice, K. M., Kirchstetter, T. W., Novakov, T., Puxbaum, H., Schmid, H., **107**(*3*), 279 (2002).

Klassen, N. V.

Water Calorimetry: A Correction to the Heat Defect Calculations. Klassen, N. V., Ross, C. K., **107**(*2*), 171 (2002).

Klinedinst, D. B.

A Critical Evaluation of Interlaboratory Data on Total, Elemental, and Isotopic Carbon in the Carbonaceous Particle Reference Material, NIST SRM 1649a. Currie, L. A., Benner, B. A., Jr., Kessler, J. D., Klinedinst, D. B., Klouda, G. A., Marolf, J. V., Slater, J. F., Wise, S. A., Cachier, H., Cary, R., Chow, J. C., Watson, J., Druffel, E. R. M., Masiello, C. A., Eglinton, T. I., Pearson, A., Reddy, C. M., Gustafsson, Ö., Quinn, J. G., Hartmann, P. C., Hedges, J. I., Prentice, K. M., Kirchstetter, T. W., Novakov, T., Puxbaum, H., Schmid, H., **107**(*3*), 279 (2002).

Klouda, G. A.

A Critical Evaluation of Interlaboratory Data on Total, Elemental, and Isotopic Carbon in the Carbonaceous Particle Reference Material, NIST SRM 1649a. Currie, L. A., Benner, B. A., Jr., Kessler, J. D., Klinedinst, D. B., Klouda, G. A., Marolf, J. V., Slater, J. F., Wise, S. A., Cachier, H., Cary, R., Chow, J. C., Watson, J., Druffel, E. R. M., Masiello, C. A., Eglinton, T. I., Pearson, A., Reddy, C. M., Gustafsson, Ö., Quinn, J. G., Hartmann, P. C., Hedges, J. I., Prentice, K. M., Kirchstetter, T. W., Novakov, T., Puxbaum, H., Schmid, H., **107**(*3*), 279 (2002).

Kluk, E.

Characterization of Corning EPMA Standard Glasses 95IRV, 95IRW, and 95IRX. Carpenter, P., Counce, D., Kluk, E., Nabelek, C., **107**(*6*), 703 (2002).

Koontz, J. E.

Accelerating Scientific Discovery Through Computation and Visualization II. Sims, J. S., George, W. L., Satterfield, S. G., Hung, H. K., Hagedorn, J. G., Ketcham, P. M., Griffin, T. J., Hagstrom, S. A., Franiatte, J. C., Bryant, G. W., Jaskólski, W., Martys, N. S., Bouldin, C. E., Simmons, V., Nicolas, O. P., Warren, J. A., am Ende, B. A., Koontz, J. E., Filla, B. J., Pourprix, V. G., Copley, S. R., Bohn, R. B., Peskin, A. P., Parker, Y. M., Devaney, J. E., **107**(*3*), 223 (2002).

L

Laesecke, A.

Through Measurement to Knowledge: The Inaugural Lecture of Heike Kamerlingh Onnes (1882). Laesecke, A., **107**(*3*), 261 (2002).

Lantz, K.

The 1997 North American Interagency Intercomparison of Ultraviolet Spectroradiometers Including Narrowband Filter Radiometers. Lantz, K., Disterhoft, P., Early, E., Thompson, A., DeLuisi, J., Berndt, J., Harrison, L., Kiedron, P., Ehramjian, J., Bernhard, G., Cabasug, L., Robertson, J., Mou, W., Taylor, T., Slusser, J., Bigelow, D., Durham, B., Janson, G., Hayes, D., Beaubien, M., Beaubien, A., **107**(*1*), 19 (2002).

Lau, A.

Self-Similarity Simplification Approaches for the Modeling and Analysis of Rockwell Hardness Indention. Ma, L., Zhou, J., Lau, A., Low, S., DeWit, R., **107**(*5*), 401 (2002).

Lee, K.-H.

The State of the Art and Practice in Digital Preservation. Lee, K.-H., Slattery, O., Lu, R., Tang, X., McCrary, V., **107**(*1*), 93 (2002).

Lett, P. D.

Treasure of the Past X: A Spectroscopic Determination of Scattering Lengths for Sodium Atom Collisions. Tiesinga, E., Williams, C. J., Julienne, P. S., Jones, K. M., Lett, P. D., Phillips, W. D., **107**(*1*), 107 (2002).

Levine, Z. H.

Diffractive Optics From Self-Assembled DNA. Levine, Z. H., **107**(*4*), 319 (2002).

Lloyd, I.

Effect of Loading Rate Upon Conventional Ceramic Microindentation Hardness. Quinn, G. D., Patel, P. J., Lloyd, I., **107**(*3*), 299 (2002).

Logan, A.

Microbeam Characterization of Corning Archeological Reference Glasses: New Additions to the Smithsonian Microbeam Standard Collection. Vicenzi, E. P., Eggins, S., Logan, A., Wysoczanski, R., **107**(*6*), 719 (2002).

Low, S.

Self-Similarity Simplification Approaches for the Modeling and Analysis of Rockwell Hardness Indention. Ma, L., Zhou, J., Lau, A., Low, S., DeWit, R., **107**(*5*), 401 (2002).

Lu, R.

The State of the Art and Practice in Digital Preservation. Lee, K.-H., Slattery, O., Lu, R., Tang, X., McCrary, V., **107**(*1*), 93 (2002).

M

Ma, L.

Self-Similarity Simplification Approaches for the Modeling and Analysis of Rockwell Hardness Indention. Ma, L., Zhou, J., Lau, A., Low, S., DeWit, R., **107**(*5*), 401 (2002).

Marinenko, R. B.

NIST Standards for Microanalysis and the Certification Process. Marinenko, R. B., **107**(*6*), 687 (2002).

Marolf, J. V.

A Critical Evaluation of Interlaboratory Data on Total, Elemental, and Isotopic Carbon in the Carbonaceous Particle Reference Material, NIST SRM 1649a. Currie, L. A., Benner, B. A., Jr., Kessler, J. D., Klinedinst, D. B., Klouda, G. A., Marolf, J. V., Slater, J. F., Wise, S. A., Cachier, H., Cary, R., Chow, J. C., Watson, J., Druffel, E. R. M., Masiello, C. A., Eglinton, T. I., Pearson, A., Reddy, C. M., Gustafsson, Ö., Quinn, J. G., Hartmann, P. C., Hedges, J. I., Prentice, K. M., Kirchstetter, T. W., Novakov, T., Puxbaum, H., Schmid, H., **107**(*3*), 279 (2002).

Marti, G. E.

Quantitating Fluorescence Intensity From Fluorophore: The Definition of MESF Assignment. Schwartz, A., Wang, L., Early, E., Gaigalas, A., Zhang, Y., Marti, G. E., Vogt, R. F., **107**(*1*), 83 (2002).

Quantitating Fluorescence Intensity From Fluorophores: Practical Use of MESF Values. Wang, L., Gaigalas, A. K., Abassi, F., Marti, G. E., Vogt, R. F., Schwarz, A., **107**(*4*), 339 (2002).

Martys, N. S.

Accelerating Scientific Discovery Through Computation and Visualization II. Sims, J. S., George, W. L., Satterfield, S. G., Hung, H. K., Hagedorn, J. G., Ketcham, P. M., Griffin, T. J., Hagstrom, S. A., Franiatte, J. C., Bryant, G. W., Jaskólski, W., Martys, N. S., Bouldin, C. E., Simmons, V., Nicolas, O. P., Warren, J. A., am Ende, B. A., Koontz, J. E., Filla, B. J., Pourprix, V. G., Copley, S. R., Bohn, R. B., Peskin, A. P., Parker, Y. M., Devaney, J. E., **107**(*3*), 223 (2002).

Masiello, C. A.

A Critical Evaluation of Interlaboratory Data on Total, Elemental, and Isotopic Carbon in the Carbonaceous Particle Reference Material, NIST SRM 1649a. Currie, L. A., Benner, B. A., Jr., Kessler, J. D., Klinedinst, D. B., Klouda, G. A., Marolf, J. V., Slater, J. F., Wise, S. A., Cachier, H., Cary, R., Chow, J. C., Watson, J., Druffel, E. R. M., Masiello, C. A., Eglinton, T. I., Pearson, A., Reddy, C. M., Gustafsson, Ö., Quinn, J. G., Hartmann, P. C., Hedges, J. I., Prentice, K. M., Kirchstetter, T. W., Novakov, T., Puxbaum, H., Schmid, H., **107**(*3*), 279 (2002).

McCrary, V.

The State of the Art and Practice in Digital Preservation. Lee, K.-H., Slattery, O., Lu, R., Tang, X., McCrary, V., **107**(*1*), 93 (2002).

Meyer, G. W.

The Role of Rendering in the Competence Project in Measurement Science for Optical Reflection and Scattering. Westlund, H. B., Meyer, G. W., Hunt, F. Y., **107**(*3*), 247 (2002).

Mielenz, K. D.

Optical Diffraction in Close Proximity to Plane Apertures. I. Boundary-Value Solutions for Circular Apertures and Slits. Mielenz, K. D., **107**(*4*), 355 (2002).

Mighell, A. D.

Conventional Cells—The Last Step Toward General Acceptance of Standard Conventional Cells for the Reporting of Crystallographic Data. Mighell, A. D., **107**(*4*), 373 (2002).

Lattice Matching (LM)—Prevention of Inadvertent Duplicate Publications of Crystal Structures. Mighell, A. D., **107**(*5*), 425 (2002).

Mills, K.

Exploring Collective Dynamics in Communication Networks. Yuan, J., Mills, K., **107**(*2*), 179 (2002).

Mizell, S.

The Visible Cement Data Set. Bentz, D. P., Mizell, S., Satterfield, S., Devaney, J., George, W., Ketcham, P., Graham, J., Porterfield, J., Quenard, D., Vallee, F., Sallee, H., Boller, E., Baruchel, J., **107**(*2*), 137 (2002).

Moncarz, H. T.

A Knowledge-Navigation System for Dimensional Metrology. Moncarz, H. T., **107**(*2*), 193 (2002).

Mou, W.

The 1997 North American Interagency Intercomparison of Ultraviolet Spectroradiometers Including Narrowband Filter Radiometers. Lantz, K., Disterhoft, P., Early, E., Thompson, A., DeLuisi, J., Berndt, J., Harrison, L., Kiedron, P., Ehramjian, J., Bernhard, G., Cabasug, L., Robertson, J., Mou, W., Taylor, T., Slusser, J., Bigelow, D., Durham, B., Janson, G., Hayes, D., Beaubien, M., Beaubien, A., **107**(*1*), 19 (2002).

Myklebust, R.

Decomposition of Wavelength Dispersive X-Ray Spectra. Rémond, G., Myklebust, R., Fialin, M., Nockolds, C., Phillips, M., Roques-Carmes, C., **107**(*6*), 509 (2002).

N

Nabelek, C.

Characterization of Corning EPMA Standard Glasses 95IRV, 95IRW, and 95IRX. Carpenter, P., Counce, D., Kluk, E., Nabelek, C., **107**(*6*), 703 (2002).

Newbury, D. E.

X-Ray Microanalysis in the Variable Pressure (Environmental) Scanning Electron Microscope. Newbury, D. E., **107**(*6*), 567 (2002).

Barriers to Quantitative Electron Probe X-Ray Microanalysis for Low Voltage Scanning Electron Microscopy. Newbury, D. E., **107**(*6*), 605 (2002).

Nicolas, O. P.

Accelerating Scientific Discovery Through Computation and Visualization II. Sims, J. S., George, W. L., Satterfield, S. G., Hung, H. K., Hagedorn, J. G., Ketcham, P. M., Griffin, T. J., Hagstrom, S. A., Franiatte, J. C., Bryant, G. W., Jaskólski, W., Martys, N. S., Bouldin, C. E., Simmons, V., Nicolas, O. P., Warren, J. A., am Ende, B. A., Koontz, J. E., Filla, B. J., Pourprix, V. G., Copley, S. R., Bohn, R. B., Peskin, A. P., Parker, Y. M., Devaney, J. E., **107**(*3*), 223 (2002).

Nicolosi, J.

The Microcalorimeter for Industrial Applications. Redfern, D., Nicolosi, J., Höhne, J., Weiland, R., Simmnacher, B., Hollerich, C., **107**(*6*), 621 (2002).

Nockolds, C.

Decomposition of Wavelength Dispersive X-Ray Spectra. Rémond, G., Myklebust, R., Fialin, M., Nockolds, C., Phillips, M., Roques-Carmes, C., **107**(*6*), 509 (2002).

Implications of Polishing Techniques in Quantitative X-Ray Microanalysis. Rémond, G., Nockolds, C., Phillips, M., Roques-Carmes, C., **107**(*6*), 639 (2002).

Novakov, T.

A Critical Evaluation of Interlaboratory Data on Total, Elemental, and Isotopic Carbon in the Carbonaceous Particle Reference Material, NIST SRM 1649a. Currie, L. A., Benner, B. A., Jr., Kessler, J. D., Klinedinst, D. B., Klouda, G. A., Marolf, J. V., Slater, J. F., Wise, S. A., Cachier, H., Cary, R., Chow, J. C., Watson, J., Druffel, E. R. M., Masiello, C. A., Eglinton, T. I., Pearson, A., Reddy, C. M., Gustafsson, Ö., Quinn, J. G., Hartmann, P. C., Hedges, J. I., Prentice, K. M., Kirchstetter, T. W., Novakov, T., Puxbaum, H., Schmid, H., **107**(*3*), 279 (2002).

P

Parker, Y. M.

Accelerating Scientific Discovery Through Computation and Visualization II. Sims, J. S., George, W. L., Satterfield, S. G., Hung, H. K., Hagedorn, J. G., Ketcham, P. M., Griffin, T. J., Hagstrom, S. A., Franiatte, J. C., Bryant, G. W., Jaskólski, W., Martys, N. S., Bouldin, C. E., Simmons, V., Nicolas, O. P., Warren, J. A., am Ende, B. A., Koontz, J. E., Filla, B. J., Pourprix, V. G., Copley, S. R., Bohn, R. B., Peskin, A. P., Parker, Y. M., Devaney, J. E., **107**(*3*), 223 (2002).

Patel, P. J.

Effect of Loading Rate Upon Conventional Ceramic Microindentation Hardness. Quinn, G. D., Patel, P. J., Lloyd, I., **107**(*3*), 299 (2002).

Pearson, A.

A Critical Evaluation of Interlaboratory Data on Total, Elemental, and Isotopic Carbon in the Carbonaceous Particle Reference Material, NIST SRM 1649a. Currie, L. A., Benner, B. A., Jr., Kessler, J. D., Klinedinst, D. B., Klouda, G. A., Marolf, J. V., Slater, J. F., Wise, S. A., Cachier, H., Cary, R., Chow, J. C., Watson, J., Druffel, E. R. M., Masiello, C. A., Eglinton, T. I., Pearson, A., Reddy, C. M., Gustafsson, Ö., Quinn, J. G., Hartmann, P. C., Hedges, J. I., Prentice, K. M., Kirchstetter, T. W., Novakov, T., Puxbaum, H., Schmid, H., **107**(*3*), 279 (2002).

Peskin, A. P.

Accelerating Scientific Discovery Through Computation and Visualization II. Sims, J. S., George, W. L., Satterfield, S. G., Hung, H. K., Hagedorn, J. G., Ketcham, P. M., Griffin, T. J., Hagstrom, S. A., Franiatte, J. C., Bryant, G. W., Jaskólski, W., Martys, N. S., Bouldin, C. E., Simmons, V., Nicolas, O. P., Warren, J. A., am Ende, B. A., Koontz, J. E., Filla, B. J., Pourprix, V. G., Copley, S. R., Bohn, R. B., Peskin, A. P., Parker, Y. M., Devaney, J. E., **107**(*3*), 223 (2002).

Phillips, M.

Decomposition of Wavelength Dispersive X-Ray Spectra. Rémond, G., Myklebust, R., Fialin, M., Nockolds, C., Phillips, M., Roques-Carmes, C., **107**(*6*), 509 (2002).

Implications of Polishing Techniques in Quantitative X-Ray Microanalysis. Rémond, G., Nockolds, C., Phillips, M., Roques-Carmes, C., **107**(*6*), 639 (2002).

Phillips, W. D.

Treasure of the Past X: A Spectroscopic Determination of Scattering Lengths for Sodium Atom Collisions. Tiesinga, E., Williams, C. J., Julienne, P. S., Jones, K. M., Lett, P. D., Phillips, W. D., **107**(*1*), 107 (2002).

Picolli, P. M.

Contamination in the Rare-Earth Element Orthophosphate Reference Samples. Donovan, J. J., Hanchar, J. M., Picolli, P. M., Schrier, M. D., Boatner, L. A., Jarosewich, E., **107**(*6*), 693 (2002).

Pingitore, N. E., Jr.

Averaging of Backscatter Intensities in Compounds. Donovan, J. J., Pingitore, N. E., Jr., Westphal, A. J., **107**(*6*), 547 (2002).

Porterfield, J.

The Visible Cement Data Set. Bentz, D. P., Mizell, S., Satterfield, S., Devaney, J., George, W., Ketcham, P., Graham, J., Porterfield, J., Quenard, D., Vallee, F., Sallee, H., Boller, E., Baruchel, J., **107**(*2*), 137 (2002).

Pourprix, V. G.

Accelerating Scientific Discovery Through Computation and Visualization II. Sims, J. S., George, W. L., Satterfield, S. G., Hung, H. K., Hagedorn, J. G., Ketcham, P. M., Griffin, T. J., Hagstrom, S. A., Franiatte, J. C., Bryant, G. W., Jaskólski, W., Martys, N. S., Bouldin, C. E., Simmons, V., Nicolas, O. P., Warren, J. A., am Ende, B. A., Koontz, J. E., Filla, B. J., Pourprix, V. G., Copley, S. R., Bohn, R. B., Peskin, A. P., Parker, Y. M., Devaney, J. E., **107**(*3*), 223 (2002).

Prentice, K. M.

A Critical Evaluation of Interlaboratory Data on Total, Elemental, and Isotopic Carbon in the Carbonaceous Particle Reference Material, NIST SRM 1649a. Currie, L. A., Benner, B. A., Jr., Kessler, J. D., Klinedinst, D. B., Klouda, G. A., Marolf, J. V., Slater, J. F., Wise, S. A., Cachier, H., Cary, R., Chow, J. C., Watson, J., Druffel, E. R. M., Masiello, C. A., Eglinton, T. I., Pearson, A., Reddy, C. M., Gustafsson, Ö., Quinn, J. G., Hartmann, P. C., Hedges, J. I., Prentice, K. M., Kirchstetter, T. W., Novakov, T., Puxbaum, H., Schmid, H., **107**(*3*), 279 (2002).

Puxbaum, H.

A Critical Evaluation of Interlaboratory Data on Total, Elemental, and Isotopic Carbon in the Carbonaceous Particle Reference Material, NIST SRM 1649a. Currie, L. A., Benner, B. A., Jr., Kessler, J. D., Klinedinst, D. B., Klouda, G. A., Marolf, J. V., Slater, J. F., Wise, S. A., Cachier, H., Cary, R., Chow, J. C., Watson, J., Druffel, E. R. M., Masiello, C. A., Eglinton, T. I., Pearson, A., Reddy, C. M., Gustafsson, Ö., Quinn, J. G., Hartmann, P. C., Hedges, J. I., Prentice, K. M., Kirchstetter, T. W., Novakov, T., Puxbaum, H., Schmid, H., **107**(*3*), 279 (2002).

Q

Quenard, D.

The Visible Cement Data Set. Bentz, D. P., Mizell, S., Satterfield, S., Devaney, J., George, W., Ketcham, P., Graham, J., Porterfield, J., Quenard, D., Vallee, F., Sallee, H., Boller, E., Baruchel, J., **107**(*2*), 137 (2002).

Quinn, G. D.

Effect of Loading Rate Upon Conventional Ceramic Microindentation Hardness. Quinn, G. D., Patel, P. J., Lloyd, I., **107**(*3*), 299 (2002).

Quinn, J. G.

A Critical Evaluation of Interlaboratory Data on Total, Elemental, and Isotopic Carbon in the Carbonaceous Particle Reference Material, NIST SRM 1649a. Currie, L. A., Benner, B. A., Jr., Kessler, J. D., Klinedinst, D. B., Klouda, G. A., Marolf, J. V., Slater, J. F., Wise, S. A., Cachier, H., Cary, R., Chow, J. C., Watson, J., Druffel, E. R. M., Masiello, C. A., Eglinton, T. I., Pearson, A., Reddy, C. M., Gustafsson, Ö., Quinn, J. G., Hartmann, P. C., Hedges, J. I., Prentice, K. M., Kirchstetter, T. W., Novakov, T., Puxbaum, H., Schmid, H., **107**(*3*), 279 (2002).

R

Randa, J.

Noise-Parameter Uncertainties: A Monte Carlo Simulation. Randa, J., **107**(*5*), 431 (2002).

Reddy, C. M.

A Critical Evaluation of Interlaboratory Data on Total, Elemental, and Isotopic Carbon in the Carbonaceous Particle Reference Material, NIST SRM 1649a. Currie, L. A., Benner, B. A., Jr., Kessler, J. D., Klinedinst, D. B., Klouda, G. A., Marolf, J. V., Slater, J. F., Wise, S. A., Cachier, H., Cary, R., Chow, J. C., Watson, J., Druffel, E. R. M., Masiello, C. A., Eglinton, T. I., Pearson, A., Reddy, C. M., Gustafsson, Ö., Quinn, J. G., Hartmann, P. C., Hedges, J. I., Prentice, K. M., Kirchstetter, T. W., Novakov, T., Puxbaum, H., Schmid, H., **107**(*3*), 279 (2002).

Redfern, D.

The Microcalorimeter for Industrial Applications. Redfern, D., Nicolosi, J., Höhne, J., Weiland, R., Simmnacher, B., Hollerich, C., **107**(*6*), 621 (2002).

Reed, S. J. B.

Optimization of Wavelength Dispersive X-Ray Spectrometry Analysis Conditions. Reed, S. J. B, **107**(*6*), 497 (2002).

Rémond, G.

Decomposition of Wavelength Dispersive X-Ray Spectra. Rémond, G., Myklebust, R., Fialin, M., Nockolds, C., Phillips, M., Roques-Carmes, C., **107**(*6*), 509 (2002).

Implications of Polishing Techniques in Quantitative X-Ray Microanalysis. Rémond, G., Nockolds, C., Phillips, M., Roques-Carmes, C., **107**(*6*), 639 (2002).

Ren, S.-C.

Transient Green's Tensor for a Layered Solid Half-Space With Different Interface Conditions. Ren, S.-C., Hsu, N. N., Eitzen, D. G., **107**(*5*), 445 (2002).

Rez, P.

Accurate Cross Sections for Microanalysis. Rez, P., **107**(*6*), 487 (2002).

Robertson, J.

The 1997 North American Interagency Intercomparison of Ultraviolet Spectroradiometers Including Narrowband Filter Radiometers. Lantz, K., Disterhoft, P., Early, E., Thompson, A., DeLuisi, J., Berndt, J., Harrison, L., Kiedron, P., Ehramjian, J., Bernhard, G., Cabasug, L., Robertson, J., Mou, W., Taylor, T., Slusser, J., Bigelow, D., Durham, B., Janson, G., Hayes, D., Beaubien, M., Beaubien, A., **107**(*1*), 19 (2002).

Roques-Carmes, C.

Decomposition of Wavelength Dispersive X-Ray Spectra. Rémond, G., Myklebust, R., Fialin, M., Nockolds, C., Phillips, M., Roques-Carmes, C., **107**(*6*), 509 (2002).

Implications of Polishing Techniques in Quantitative X-Ray Microanalysis. Rémond, G., Nockolds, C., Phillips, M., Roques-Carmes, C., **107**(*6*), 639 (2002).

Ross, C. K.

Water Calorimetry: A Correction to the Heat Defect Calculations. Klassen, N. V., Ross, C. K., **107**(*2*), 171 (2002).

S

Sallee, H.

The Visible Cement Data Set. Bentz, D. P., Mizell, S., Satterfield, S., Devaney, J., George, W., Ketcham, P., Graham, J., Porterfield, J., Quenard, D., Vallee, F., Sallee, H., Boller, E., Baruchel, J., **107**(*2*), 137 (2002).

Santana, C.

Development of a Tunable LED-Based Colorimetric Source. Brown, S. W., Santana, C., Eppeldauer, G. P., **107**(*4*), 363 (2002).

Satterfield, S. G.

Accelerating Scientific Discovery Through Computation and Visualization II. Sims, J. S., George, W. L., Satterfield, S. G., Hung, H. K., Hagedorn, J. G., Ketcham, P. M., Griffin, T. J., Hagstrom, S. A., Franiatte, J. C., Bryant, G. W., Jaskólski, W., Martys, N. S., Bouldin, C. E., Simmons, V., Nicolas, O. P., Warren, J. A., am Ende, B. A., Koontz, J. E., Filla, B. J., Pourprix, V. G., Copley, S. R., Bohn, R. B., Peskin, A. P., Parker, Y. M., Devaney, J. E., **107**(*3*), 223 (2002).

The Visible Cement Data Set. Bentz, D. P., Mizell, S., Satterfield, S., Devaney, J., George, W., Ketcham, P., Graham, J., Porterfield, J., Quenard, D., Vallee, F., Sallee, H., Boller, E., Baruchel, J., **107**(*2*), 137 (2002).

Schmid, H.

A Critical Evaluation of Interlaboratory Data on Total, Elemental, and Isotopic Carbon in the Carbonaceous Particle Reference Material, NIST SRM 1649a. Currie, L. A., Benner, B. A., Jr., Kessler, J. D., Klinedinst, D. B., Klouda, G. A., Marolf, J. V., Slater, J. F., Wise, S. A., Cachier, H., Cary, R., Chow, J. C., Watson, J., Druffel, E. R. M., Masiello, C. A., Eglinton, T. I., Pearson, A., Reddy, C. M., Gustafsson, Ö., Quinn, J. G., Hartmann, P. C., Hedges, J. I., Prentice, K. M., Kirchstetter, T. W., Novakov, T., Puxbaum, H., Schmid, H., **107**(*3*), 279 (2002).

Schrier, M. D.

Contamination in the Rare-Earth Element Orthophosphate Reference Samples. Donovan, J. J., Hanchar, J. M., Picolli, P. M., Schrier, M. D., Boatner, L. A., Jarosewich, E., **107**(*6*), 693 (2002).

Schwartz, A.

Quantitating Fluorescence Intensity From Fluorophore: The Definition of MESF Assignment. Schwartz, A., Wang, L., Early, E., Gaigalas, A., Zhang, Y., Marti, G. E., Vogt, R. F., **107**(*1*), 83 (2002).

Schwarz, A.

Quantitating Fluorescence Intensity From Fluorophores: Practical Use of MESF Values. Wang, L., Gaigalas, A. K., Abassi, F., Marti, G. E., Vogt, R. F., Schwarz, A., **107**(*4*), 339 (2002).

Shreiner, R. H.

Stability of Standard Electrolytic Conductivity Solutions in Glass Containers. Shreiner, R. H., **107**(*5*), 393 (2002).

Simmnacher, B.

The Microcalorimeter for Industrial Applications. Redfern, D., Nicolosi, J., Höhne, J., Weiland, R., Simmnacher, B., Hollerich, C., **107**(*6*), 621 (2002).

Simmons, V.

Accelerating Scientific Discovery Through Computation and Visualization II. Sims, J. S., George, W. L., Satterfield, S. G., Hung, H. K., Hagedorn, J. G., Ketcham, P. M., Griffin, T. J., Hagstrom, S. A., Franiatte, J. C., Bryant, G. W., Jaskólski, W., Martys, N. S., Bouldin, C. E., Simmons, V., Nicolas, O. P., Warren, J. A., am Ende, B. A., Koontz, J. E., Filla, B. J., Pourprix, V. G., Copley, S. R., Bohn, R. B., Peskin, A. P., Parker, Y. M., Devaney, J. E., **107**(*3*), 223 (2002).

Sims, J. S.

Accelerating Scientific Discovery Through Computation and Visualization II. Sims, J. S., George, W. L., Satterfield, S. G., Hung, H. K., Hagedorn, J. G., Ketcham, P. M., Griffin, T. J., Hagstrom, S. A., Franiatte, J. C., Bryant, G. W., Jaskólski, W., Martys, N. S., Bouldin, C. E., Simmons, V., Nicolas, O. P., Warren, J. A., am Ende, B. A., Koontz, J. E., Filla, B. J., Pourprix, V. G., Copley, S. R., Bohn, R. B., Peskin, A. P., Parker, Y. M., Devaney, J. E., **107**(*3*), 223 (2002).

Slater, J. F.

A Critical Evaluation of Interlaboratory Data on Total, Elemental, and Isotopic Carbon in the Carbonaceous Particle Reference Material, NIST SRM 1649a. Currie, L. A., Benner, B. A., Jr., Kessler, J. D., Klinedinst, D. B., Klouda, G. A., Marolf, J. V., Slater, J. F., Wise, S. A., Cachier, H., Cary, R., Chow, J. C., Watson, J., Druffel, E. R. M., Masiello, C. A., Eglinton, T. I., Pearson, A., Reddy, C. M., Gustafsson, Ö., Quinn, J. G., Hartmann, P. C., Hedges, J. I., Prentice, K. M., Kirchstetter, T. W., Novakov, T., Puxbaum, H., Schmid, H., **107**(*3*), 279 (2002).

Slattery, O.

The State of the Art and Practice in Digital Preservation. Lee, K.-H., Slattery, O., Lu, R., Tang, X., McCrary, V., **107**(*1*), 93 (2002).

Slusser, J.

The 1997 North American Interagency Intercomparison of Ultraviolet Spectroradiometers Including Narrowband Filter Radiometers. Lantz, K., Disterhoft, P., Early, E., Thompson, A., DeLuisi, J., Berndt, J., Harrison, L., Kiedron, P., Ehramjian, J., Bernhard, G., Cabasug, L., Robertson, J., Mou, W., Taylor, T., Slusser, J., Bigelow, D., Durham, B., Janson, G., Hayes, D., Beaubien, M., Beaubien, A., **107**(*1*), 19 (2002).

Small, J. A.

The Analysis of Particles at Low Accelerating Voltages (≤ 10 kV) With Energy Dispersive X-Ray Spectroscopy (EDS). Small, J. A., **107**(*6*), 555 (2002).

Statham, P. J.

Limitations to Accuracy in Extracting Characteristic Line Intensities From X-Ray Spectra. Statham, P. J., **107**(*6*), 531 (2002).

Stone, P. M.

Electron-Impact Cross Sections for Dipole- and Spin-Allowed Excitations of Hydrogen, Helium, and Lithium. Stone, P. M., Kim, Y.-K., Desclaux, J. P., **107**(*4*), 327 (2002).

T

Tang, X.

The State of the Art and Practice in Digital Preservation. Lee, K.-H., Slattery, O., Lu, R., Tang, X., McCrary, V., **107**(*1*), 93 (2002).

Taylor, T.

The 1997 North American Interagency Intercomparison of Ultraviolet Spectroradiometers Including Narrowband Filter Radiometers. Lantz, K., Disterhoft, P., Early, E., Thompson, A., DeLuisi, J., Berndt, J., Harrison, L., Kiedron, P., Ehramjian, J., Bernhard, G., Cabasug, L., Robertson, J., Mou, W., Taylor, T., Slusser, J., Bigelow, D., Durham, B., Janson, G., Hayes, D., Beaubien, M., Beaubien, A., **107**(*1*), 19 (2002).

Thompson, A.

The 1997 North American Interagency Intercomparison of Ultraviolet Spectroradiometers Including Narrowband Filter Radiometers. Lantz, K., Disterhoft, P., Early, E., Thompson, A., DeLuisi, J., Berndt, J., Harrison, L., Kiedron, P., Ehramjian, J., Bernhard, G., Cabasug, L., Robertson, J., Mou, W., Taylor, T., Slusser, J., Bigelow, D., Durham, B., Janson, G., Hayes, D., Beaubien, M., Beaubien, A., **107**(*1*), 19 (2002).

Tiesinga, E.

Treasure of the Past X: A Spectroscopic Determination of Scattering Lengths for Sodium Atom Collisions. Tiesinga, E., Williams, C. J., Julienne, P. S., Jones, K. M., Lett, P. D., Phillips, W. D., **107**(*1*), 107 (2002).

V

Vallee, F.

The Visible Cement Data Set. Bentz, D. P., Mizell, S., Satterfield, S., Devaney, J., George, W., Ketcham, P., Graham, J., Porterfield, J., Quenard, D., Vallee, F., Sallee, H., Boller, E., Baruchel, J., **107**(*2*), 137 (2002).

Vicenzi, E. P.

Microbeam Characterization of Corning Archeological Reference Glasses: New Additions to the Smithsonian Microbeam Standard Collection. Vicenzi, E. P., Eggins, S., Logan, A., Wysoczanski, R., **107**(*6*), 719 (2002).

Vogt, R. F.

Quantitating Fluorescence Intensity From Fluorophore: The Definition of MESF Assignment. Schwartz, A., Wang, L., Early, E., Gaigalas, A., Zhang, Y., Marti, G. E., Vogt, R. F., **107**(*1*), 83 (2002).

Quantitating Fluorescence Intensity From Fluorophores: Practical Use of MESF Values. Wang, L., Gaigalas, A. K., Abassi, F., Marti, G. E., Vogt, R. F., Schwarz, A., **107**(*4*), 339 (2002).

W

Wallace, W. E.

Data Analysis Methods for Synthetic Polymer Mass Spectrometry: Autocorrelation. Wallace, W. E., Guttman, C. M., **107**(*1*), 1 (2002).

Wang, L.

Quantitating Fluorescence Intensity From Fluorophore: The Definition of MESF Assignment. Schwartz, A., Wang, L., Early, E., Gaigalas, A., Zhang, Y., Marti, G. E., Vogt, R. F., **107**(*1*), 83 (2002).

Quantitating Fluorescence Intensity From Fluorophores: Practical Use of MESF Values. Wang, L., Gaigalas, A. K., Abassi, F., Marti, G. E., Vogt, R. F., Schwarz, A., **107**(*4*), 339 (2002).

Warren, J. A.

Accelerating Scientific Discovery Through Computation and Visualization II. Sims, J. S., George, W. L., Satterfield, S. G., Hung, H. K., Hagedorn, J. G., Ketcham, P. M., Griffin, T. J., Hagstrom, S. A., Franiatte, J. C., Bryant, G. W., Jaskólski, W., Martys, N. S., Bouldin, C. E., Simmons, V., Nicolas, O. P., Warren, J. A., am Ende, B. A., Koontz, J. E., Filla, B. J., Pourprix, V. G., Copley, S. R., Bohn, R. B., Peskin, A. P., Parker, Y. M., Devaney, J. E., **107**(*3*), 223 (2002).

Watson, J.

A Critical Evaluation of Interlaboratory Data on Total, Elemental, and Isotopic Carbon in the Carbonaceous Particle Reference Material, NIST SRM 1649a. Currie, L. A., Benner, B. A., Jr., Kessler, J. D., Klinedinst, D. B., Klouda, G. A., Marolf, J. V., Slater, J. F., Wise, S. A., Cachier, H., Cary, R., Chow, J. C., Watson, J., Druffel, E. R. M., Masiello, C. A., Eglinton, T. I., Pearson, A., Reddy, C. M., Gustafsson, Ö., Quinn, J. G., Hartmann, P. C., Hedges, J. I., Prentice, K. M., Kirchstetter, T. W., Novakov, T., Puxbaum, H., Schmid, H., **107**(*3*), 279 (2002).

Weiland, R.

The Microcalorimeter for Industrial Applications. Redfern, D., Nicolosi, J., Höhne, J., Weiland, R., Simmnacher, B., Hollerich, C., **107**(*6*), 621 (2002).

Westlund, H. B.

The Role of Rendering in the Competence Project in Measurement Science for Optical Reflection and Scattering. Westlund, H. B., Meyer, G. W., Hunt, F. Y., **107**(*3*), 247 (2002).

Westphal, A. J.

Averaging of Backscatter Intensities in Compounds. Donovan, J. J., Pingitore, N. E., Jr., Westphal, A. J., **107**(*6*), 547 (2002).

Whaling, W.

Argon I Lines Produced in a Hollow Cathode Source, 332 nm to 5865 nm. Whaling, W., Anderson, W. H. C., Carle, M. T., Brault, J. W., Zarem, H. A., **107**(*2*), 149 (2002).

Wight, S. A.

Copper Oxide Precipitates in NBS Standard Reference Material 482. Windsor, E. S., Carlton, R. A., Gillen, G., Wight, S. A., Bright, D. S., **107**(*6*), 663 (2002).

Williams, C. J.

Treasure of the Past X: A Spectroscopic Determination of Scattering Lengths for Sodium Atom Collisions. Tiesinga, E., Williams, C. J., Julienne, P. S., Jones, K. M., Lett, P. D., Phillips, W. D., **107**(*1*), 107 (2002).

Windsor, E. S.

Copper Oxide Precipitates in NBS Standard Reference Material 482. Windsor, E. S., Carlton, R. A., Gillen, G., Wight, S. A., Bright, D. S., **107**(*6*), 663 (2002).

Wise, S. A.

A Critical Evaluation of Interlaboratory Data on Total, Elemental, and Isotopic Carbon in the Carbonaceous Particle Reference Material, NIST SRM 1649a. Currie, L. A., Benner, B. A., Jr., Kessler, J. D., Klinedinst, D. B., Klouda, G. A., Marolf, J. V., Slater, J. F., Wise, S. A., Cachier, H., Cary, R., Chow, J. C., Watson, J., Druffel, E. R. M., Masiello, C. A., Eglinton, T. I., Pearson, A., Reddy, C. M., Gustafsson, Ö., Quinn, J. G., Hartmann, P. C., Hedges, J. I., Prentice, K. M., Kirchstetter, T. W., Novakov, T., Puxbaum, H., Schmid, H., **107**(*3*), 279 (2002).

Wysoczanski, R.

Microbeam Characterization of Corning Archeological Reference Glasses: New Additions to the Smithsonian Microbeam Standard Collection. Vicenzi, E. P., Eggins, S., Logan, A., Wysoczanski, R., **107**(*6*), 719 (2002).

Y

Yuan, J.

Exploring Collective Dynamics in Communication Networks. Yuan, J., Mills, K., **107**(*2*), 179 (2002).

Z

Zarem, H. A.

Argon I Lines Produced in a Hollow Cathode Source, 332 nm to 5865 nm. Whaling, W., Anderson, W. H. C., Carle, M. T., Brault, J. W., Zarem, H. A., **107**(*2*), 149 (2002).

Zhang, Y.

Quantitating Fluorescence Intensity From Fluorophore: The Definition of MESF Assignment. Schwartz, A., Wang, L., Early, E., Gaigalas, A., Zhang, Y., Marti, G. E., Vogt, R. F., **107**(*1*), 83 (2002).

Zhou, J.

Self-Similarity Simplification Approaches for the Modeling and Analysis of Rockwell Hardness Indention. Ma, L., Zhou, J., Lau, A., Low, S., DeWit, R., **107**(*5*), 401 (2002).